

AMENDMENTS TO THE CLAIMS

1-35. (Canceled)

36. (Currently Amended) A method for targeting a target polypeptide for ubiquitin-dependent proteolysis in a ~~eukaryotic~~ mammalian cell, comprising:

providing a ~~eukaryotic~~ mammalian cell comprising a hybrid polypeptide that comprises (i) an F-box ~~consisting of~~ comprising an amino acid sequence that is encoded by ~~the a~~ a nucleotide sequence ~~in that is at least about 95% identical to SEQ ID NO: [[3]] 49 that encodes amino acids 148-192 of SEQ ID NO: 4 or a functional homolog or portion thereof,~~ and (ii) a target polypeptide interaction domain that binds to the target polypeptide, wherein the F-box recruits the hybrid polypeptide to a Skp1/Cul 1/F-box protein (SCF) ubiquitin ligase complex, thereby targeting the target polypeptide for ubiquitin-dependent proteolysis in the ~~eukaryotic~~ mammalian cell.

37-38. (Canceled)

39. (Previously Presented) The method of claim 36, wherein said ubiquitin-dependent proteolysis is by the proteasome.

40-45. (Canceled)

46. (Previously Presented) The method of claim 36, wherein the target polypeptide is targeted for proteolysis in vitro.

47. (Canceled)

48. (Previously presented) The method of claim 36, wherein the target polypeptide interaction domain is selected from the group consisting of a papillomavirus E7 polypeptide, and an SV40 LTP polypeptide.

49. (Currently amended) The method of claim 36, wherein the target polypeptide is selected from the group consisting of a retinoblastoma polypeptide, a p107 polypeptide, I κ B, ~~Sic1p~~ Sic1, ~~Cln2p~~ Cln2, a papillomavirus E2 polypeptide ~~or~~ and beta- catenin.

50-60. (Canceled)

61. (Currently Amended) The method of claim 36, wherein the hybrid polypeptide further comprising comprises a WD domain consisting essentially of an amino acid sequence selected from the group consisting of amino acids 260-293 of SEQ ID NO: 4; amino acids 305-333 of SEQ ID NO: 4; amino acids 345-373 of SEQ ID NO: 4; amino acids 388-416 of SEQ ID NO: 4;

amino acids 428-456 of SEQ ID NO: 4; amino acids 468-497 of SEQ ID NO: 4 and amino acids 518-546 of SEQ ID NO: 4.

62. **(Canceled)**

63. **(Currently amended)** The method of claim ~~62~~ 36, wherein the mammalian cell is a human cell.

64. **(Canceled)**

65. **(Currently Amended)** A method for targeting a target polypeptide for ubiquitin-dependent proteolysis in a ~~eukaryotic~~ mammalian cell, comprising:

providing a ~~eukaryotic~~ mammalian cell comprising a hybrid polypeptide that comprises (i) ~~a peptide~~ an amino acid sequence that is encoded by ~~the nucleotide sequence~~ a nucleic acid that hybridizes under stringent hybridization conditions including a wash step at 65 °C to set forth in a nucleic acid consisting of SEQ ID NOs NO: [[3]] 48 or functional homolog or portion thereof, and (ii) a target polypeptide interaction domain that binds to the target polypeptide, wherein the peptide recruits the hybrid polypeptide to an SCF ubiquitin ligase complex, thereby targeting the target polypeptide for ubiquitin-dependent proteolysis in the ~~eukaryotic~~ mammalian cell.

66-70. **(Canceled)**

71. **(New)** The method of claim 36, wherein the amino acid sequence is encoded by a nucleotide sequence that is at least about 98% identical to SEQ ID NO: 49.

72. **(New)** The method of claim 71, wherein the amino acid sequence is encoded by a nucleotide sequence that is at least about 99% identical to SEQ ID NO: 49.

73. **(New)** The method of claim 72, wherein the amino acid sequence is encoded by a nucleotide sequence that is identical to SEQ ID NO: 49.

74. **(New)** The method of claim 36, wherein the amino acid sequence is encoded by a nucleotide sequence that is at least about 95% identical to SEQ ID NO: 3.

75. **(New)** The method of claim 74, wherein the amino acid sequence is encoded by a nucleotide sequence that is at least about 98% identical to SEQ ID NO: 3.

76. **(New)** The method of claim 75, wherein the amino acid sequence is encoded by a nucleotide sequence that is identical to SEQ ID NO: 3.

77. **(New)** The method of claim 65, wherein the amino acid sequence is encoded by a nucleic acid that hybridizes under stringent hybridization conditions including a wash step at 65 °C to a nucleic acid consisting of SEQ ID NO: 3.
78. **(New)** The method of claim 36, wherein the mammalian cell is a murine cell.
79. **(New)** The method of claim 65, wherein the mammalian cell is a human cell.
80. **(New)** The method of claim 65, wherein the mammalian cell is a murine cell.